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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,037	02/08/2002	Brent E. Logan	4527-103.1 US	3613

7590

06/12/2003

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EXAMINER

HARRIS, CHANDA L

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 06/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,037

Applicant(s)

LOGAN, BRENT E.

Examiner

Chanda L. Harris

Art Unit

3714

-- Th MAILING DATE of this communication appears on the cover sheet with th corr spond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 14, 15, 17, 19, 20 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 14, 15, 17, 19, 20 and 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

The request filed on 4/17/03 for a Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/071,037 is acceptable and an RCE has been established. An action on the RCE follows.

Status of Claims

In response to the Amendment filed on 3/10/03, Claims 12,14-15, 17,19-20, and 33-40 are pending.

Specification

The continuity data on the first page of the specification needs to be updated.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12,14-15,17,19-20, and 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter et al. (US 5,036,858).

1. [Claims 12,17]: Regarding Claims 12 and 17, Carter discloses determining a

Art Unit: 3714

pattern of sonic variations in alpha rhythm, said pattern comprising a plurality of sequences of tones (e.g. gradually reduce to 5Hz over 2 to 3 minutes, stay at 5 Hz for 10 to 15 minutes, etc.), each sequence being repeated at a predetermined tempo. Carter discloses transmitting each of said sequence of tones in a soundwave form to said human or premature baby (i.e. user) during a predetermined period (e.g. 2 minutes at 18 Hz), wherein a tempo at which each subsequent said sequence of tones is repeated is selected to be increased or decreased (e.g. 1 minute with no signal, 2 minutes at 10 Hz) during the predetermined period thereby adjusting cognitive function of the postnatal human and said tones in said pattern of sonic variations are an alpha rhythm baseline tone (e.g. 10 Hz) or a tonal variation from said alpha rhythm baseline tone (e.g. 18 Hz = beta-rhythm). See Col.1: 23-28 and Col.3: 49-61.

2. [Claims 14,19]: Regarding Claims 14 and 19, Carter discloses storing said pattern of sonic variations in an electronic integrated circuit (e.g. programmable timing generator, memory). See Col.3: 8-13, 15-19.

3. [Claims 15,20]: Regarding Claims 15 and 20, Carter discloses transmitting said stored plurality of patterns from said electronic integrated circuit to said human or premature baby (i.e. user) with a sonic transducer (i.e. audio amplifier). See Col.3: 15-27.

4. [Claims 33,37-38]: Regarding Claims 33 and 37-38, Carter discloses means for determining a pattern of sonic variations, said pattern comprising a plurality of sequences of tones, each sequence being repeated at a predetermined tempo; means for selecting each of said sequence of tones to be transmitted at a predetermined time during a predetermined period; and means for transmitting each of said sequence of tones in soundwave form to said human or premature baby during said predetermined period, wherein said tones in said pattern of sonic variations are a baseline tone or a tonal variation from said baseline tone in which subsequent sequences increase or decrease in tempo thereby adjusting cognitive function of the postnatal human or premature baby. See FIG.1.

5. [Claims 34,39]: Regarding Claims 34 and 39, Carter discloses means for storing said pattern of sonic variations in an electronic integrated circuit (e.g. keypad, personal or laptop computer). See Col.3: 33-36.

6. [Claims 35,40]: Regarding Claims 35 and 40, Carter discloses means for transmitting (i.e. apparatus) comprises said stored plurality of patterns from said electronic integrated circuit to said human or premature baby with a sonic transducer. See Col.3: 8-13.

7. [Claim 36]: Regarding Claim 36, Carter discloses means (i.e. programmable timing generator) for determining a pattern of sonic variations, said pattern comprising a plurality of sequence of tones, each sequence being repeated at a predetermined

Art Unit: 3714

tempo, said tones in said pattern of sonic variations are an alpha rhythm baseline tone or a tonal variation from said alpha rhythm baseline tone; means (i.e. microprocessor) for selecting each of said sequence of tones to be transmitted at a predetermined time during a predetermined period; means (i.e. amplifier) for transmitting each of said sequence of tones in soundwave form to said human during said predetermined period; means for positioning a transmission means proximate to a forehead of said human and transmitting said sequence of tones aurally thereby adjusting cognitive function of the postnatal human. See FIG.1.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Jaillet (US 6,443,977)
-changing critical brain activity
- Carter et al. (Re. 36,348)
-changing brain wave frequency
- Bakerich et al. (US 3,753,433)
-electroencephalophone and feedback system
- Logan (US 6,494,719)
-pattern of sonic variations
- Bau (5,443,076)
-synchronized alpha rhythm brain functioning

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. This action is made NON-FINAL.

Art Unit: 3714


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanda L. Harris whose telephone number is 703-308-8358. The examiner can normally be reached on M-F 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

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June 7, 2003


S. THOMAS HUGHES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700